

AMENDMENTS TO THE CLAIMS:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-15 (canceled)

Claim 16 (currently amended):

A process for loading an oligosaccharide into erythrocytic cells comprising:

providing erythrocytic cells having an alcohol;

removing at least a portion of the alcohol from the erythrocytic cells to produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a the group of temperature ranges comprising ~~consisting of~~ a low phase transition temperature range, an intermediate phase transition temperature range, and a high phase transition temperature range; and

disposing the produced erythrocytic cells in an oligosaccharide solution for loading an oligosaccharide into the erythrocytic cells in vitro.

Claim 17 (currently amended):

The process of Claim 16 wherein said oligosaccharide solution includes a temperature that approximates the temperature within the temperature range selected from the group of temperature ranges ~~in a range that approximates the range of temperatures for the phase transition temperature range.~~

Claim 18 (previously presented):

The process of Claim 16 additionally comprising heating the oligosaccharide solution to increase the loading efficiency of the oligosaccharide into the erythrocytic cells.

Claim 19 (previously presented):

The process of Claim 17 additionally comprising heating the oligosaccharide solution to increase the loading efficiency of the oligosaccharide into the erythrocytic cells.

Claim 20 (currently amended):

The process of Claim 16 additionally comprising heating the oligosaccharide solution to a temperature in the high phase transition temperature range to increase the loading efficiency of the oligosaccharide ~~oligosacchride~~ into the erythrocytic cells.

Claim 21 (currently amended):

The process of Claim 17 additionally comprising heating the oligosaccharide solution to a temperature in the high phase transition temperature range to increase the loading efficiency of the oligosaccharide ~~oligosacchride~~ into the erythrocytic cells.

Claim 22 (canceled)

Claim 23 (canceled)

Claim 24 (currently amended)

The process of Claim 16 wherein said erythrocytic cells comprise erythrocytic membranes respectively including a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from said group of temperature ranges comprising said low phase transition temperature range, said intermediate phase transition temperature range, and said high phase transition temperature range.

Claim 25 (canceled)

Claim 26 (previously presented):

The process of Claim 16 wherein said high phase transition temperature range is greater than about 30⁰ C.

Claim 27 (previously presented):

The process of Claim 16 wherein said erythrocytic cells do not include a fixative.

Claim 28 (previously presented):

The process of Claim 16 wherein said intermediate phase transition temperature range ranges from a temperature greater than about 20⁰ C to a temperature equal to or less than about 30⁰ C.

Claim 29 (previously presented):

The process of Claim 16 wherein said high phase transition temperature range ranges from a temperature greater than about 30⁰ C to a temperature equal to or less than about 50⁰ C.

Claim 30 (previously presented):

The process of Claim ~~23~~ 16 wherein said low phase transition temperature range ranges from a temperature greater than about 2⁰ C to a temperature equal to or less than about 20⁰ C.

Claim 31 (previously presented):

The process of Claim 29 wherein said high phase transition temperature range ranges from about 30⁰ C to about 50⁰ C.

Claim 32 (previously presented):

The process of Claim 26 wherein said high phase transition temperature range ranges from about 32° C to about 38° C.

Claim 33 (previously presented):

The process of Claim 16 wherein said oligosaccharide is trehalose.

Claim 34 (previously presented):

The process of Claim 26 wherein said oligosaccharide is trehalose.

Claim 35 (canceled)

Claim 36 (canceled)

Claims 37-42 (canceled)

Claim 43 (currently amended):

A process of preparing loaded erythrocytic cells comprising:

providing mammalian erythrocytic cells having selected
~~from a mammalian species and including~~ an alcohol;

removing at least a portion of the alcohol from the erythrocytic cells to produce erythrocytic cells having a phase transition when the produced erythrocytic cells have a temperature within a temperature range selected from a group of temperature ranges comprising at least three phase transition temperature ranges; and

loading an oligosaccharide into the produced erythrocytic cells at a temperature in a range of temperatures approximating one of the three phase transition temperature ranges to produce loaded erythrocytic cells.

Claim 44 (previously presented):

The process of Claim 43 wherein said loading comprises loading with an oligosaccharide solution.

Claim 45 (canceled)

Claim 46 (currently amended):

The process of Claim 43 wherein said loading comprises incubating the produced erythrocytic cells with the oligosaccharide solution at a temperature in a range of temperatures approximating one of the at least three phase transition temperature ranges.

Claim 47 (previously presented):

The process of Claim 43 wherein said loading is without a fixative.

Claim 48 (currently amended):

The process of Claim 43 wherein said erythrocytic cells are comprise human erythrocytic cells.

Claim 49 (previously presented):

Loaded erythrocytic cells produced in accordance with the process of Claim 43.

Claims 50-61 (canceled)

62. (new) A process for loading an oligosaccharide into an erythrocytic cell comprising:

providing an erythrocytic cell having cholesterol;
removing at least a portion of the cholesterol from the erythrocytic cell to produce an erythrocytic cell having a phase transition when the produced erythrocytic cell has a temperature within a temperature range selected from a group of temperature ranges comprising a low phase-transition temperature range, an intermediate phase-transition temperature range, and a high phase-transition temperature range; and

disposing the produced erythrocytic cell in an oligosaccharide solution for loading an oligosaccharide into the erythrocytic cell *in vitro*.

63. (new) The process of Claim 62 wherein said oligosaccharide solution includes said temperature range.

64. (new) The process of Claim 62 additionally comprising increasing the loading efficiency of the oligosaccharide into the erythrocytic cell.

65. (new) The process of Claim 62 wherein said low phase-transition temperature range ranges from a temperature greater than about 2⁰ C to a temperature equal to or less than about 20⁰ C.

66. (new) The process of Claim 62 wherein said intermediate phase-transition temperature range ranges from a temperature greater than about 20⁰ C to a temperature equal to or less than about 30⁰ C.

67. (new) The process of Claim 62 wherein said high phase-transition temperature range ranges from a temperature greater than about 30⁰ C to a temperature equal to or less than about 50⁰ C.

68. (new) The process of Claim 67 wherein said high phase transition temperature range ranges from about 30⁰ C to about 40⁰ C.

69. (new) The process of Claim 67 wherein said high phase transition temperature range ranges from about 32⁰ C to about 38⁰ C.

70. (new) The process of Claim 62 wherein said oligosaccharide comprises trehalose.

71. (new) The process of Claim 62 wherein said loading of the oligosaccharide comprises loading by fluid phase endocytosis.

72. (new) The process of Claim 62 wherein said removing at least a portion of the cholesterol comprises removing at least about 10% by wt. of the cholesterol.

73. (new) The process of Claim 62 wherein said removing at least a portion of the cholesterol comprises removing at least about 30% by wt. of the cholesterol.

74. (new) The process of Claim 62 wherein said produced erythrocytic cell comprises from about 20% by wt. to about 40% by wt. of the cholesterol.

75. (new) The process of Claim 62 wherein said produced erythrocytic cell comprises from about 20% by wt. to about 30% by wt. of the cholesterol.

76. (new) The process of Claim 16 wherein said alcohol comprises a steroid alcohol.

77. (new) The process of Claim 76 wherein said steroid alcohol comprises at least one side chain having 8 to 10 carbon atoms.

78. (new) The process of Claim 16 wherein said alcohol comprises from 25 to 27 carbon atoms.

79. (new) The process of Claim 16 wherein said alcohol comprises cholesterol.

80. (new) The process of Claim 16 wherein said removing at least a portion of the alcohol comprises removing at least about 10% by wt. of the alcohol.

81. (new) The process of Claim 16 wherein said removing at least a portion of the alcohol comprises removing at least about 30% by wt. of the alcohol.

82. (new) The process of Claim 16 wherein said produced erythrocytic cells comprise from about 20% by wt. to about 40% by wt. of the alcohol.

83. (new) The process of Claim 16 wherein said produced erythrocytic cells comprise from about 20% by wt. to about 30% by wt. of the alcohol.

84. (new) The process of Claim 16 wherein said loading of the oligosaccharide comprises loading by fluid phase endocytosis.

85. (new) Erythrocytic cells produced in accordance with the process of Claim 16.

86. (new) An erythrocytic cell produced in accordance with the process of Claim 62.

87. (new) The process of Claim 43 wherein said alcohol comprises a steroid alcohol.

88. (new) The process of Claim 87 wherein said steriod alcohol comprises at least one side chain having 8 to 10 carbon atoms.

89. (new) The process of Claim 43 wherein said alcohol comprises from 25 to 27 carbon atoms.

90. (new) The process of Claim 43 wherein said alcohol comprises cholesterol.

91. (new) The process of Claim 43 wherein said removing at least a portion of the alcohol comprises removing at least about 10% by wt. of the alcohol.

92. (new) The process of Claim 43 wherein said removing at least a portion of the alcohol comprises removing at least about 30% by wt. of the alcohol.

93. (new) The process of Claim 43 wherein said produced erythrocytic cells comprise from about 20% by wt. to about 40% by wt. of the alcohol.

94. (new) The process of Claim 43 wherein said produced erythrocytic cells comprise from about 20% by wt. to about 30% by wt. of the alcohol.

95. (new) The process of Claim 43 wherein said loading of the oligosaccharide comprises loading by fluid phase endocytosis.

96. (new) The process of Claim 43 wherein said loading an oligosaccharide comprises loading the oligosaccharide *in vitro*.